

AMENDMENTS TO THE CLAIMS:

1. (Currently amended) A semiconductor film formation device, comprising:

a reaction vessel that includes a gas flow path to allow a source gas to pass through and a substrate mount site provided in the gas flow path to mount a substrate;

a heater that is disposed outside of the reaction vessel and close to the substrate mount site;

a cooling device ~~temperature control means~~ that is disposed outside of the reaction vessel and opposite to the heater ~~substrate mount site and close to the reaction vessel~~ to control an ~~the~~ internal temperature of the reaction vessel; and

a thermal conductivity adjusting member that is disposed between the reaction vessel and the cooling device ~~temperature control means~~;

wherein the thermal conductivity adjusting member comprises ~~has~~ a first section with a thermal conductivity different from a ~~the~~ section other than the first section along the gas flow path to lower a thermal diffusion effect of the source gas in the first section.

2. (Cancelled)

3. (Currently amended) The semiconductor film formation device according to claim 1, wherein:

the first section comprises ~~has~~ an interspace formed between the reaction vessel and the thermal conductivity adjusting member.

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4. (Currently amended) The semiconductor film formation device according to claim 3,
wherein:

the interspace comprises ~~has~~ a variable height along the gas flow path.

5. (Currently amended) The semiconductor film formation device according to claim 1,
wherein:

the first section comprises ~~is of~~ a material whose thermal conductivity is different
from that of a ~~the other~~ section other than the first section.

6. (Currently amended) A semiconductor film formation device, comprising:

a reaction vessel that includes a gas flow path to allow a source gas to pass through
and a substrate mount site provided in the gas flow path to mount a substrate;

a heater that is disposed outside of the reaction vessel and close to the substrate
mount site; and

a cooling device ~~temperature control means~~ that is disposed outside of the reaction
vessel and opposite to the heater ~~substrate mount site and close to the reaction vessel~~ to
control an ~~the~~ internal temperature of the reaction vessel;

wherein the reaction vessel comprises ~~has~~ a first section with a wall thickness smaller
than ~~a the other~~ section other than the first section to form an interspace between the reaction
vessel and the cooling device ~~temperature control means~~ to lower a thermal diffusion effect of
the source gas in the first section.

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7. (Cancelled)

8. (Currently amended) The semiconductor film formation device according to claim 6,
wherein:

the interspace comprises has a variable height along the gas flow path.

9. (Currently amended) A semiconductor film formation device, comprising:

a reaction vessel that includes a gas flow path to allow a source gas to pass through
and a substrate mount site provided in the gas flow path to mount a substrate;

a heater that is disposed outside of the reaction vessel and close to the substrate
mount site;

a cooling device ~~temperature control means~~ that is disposed outside of the reaction
vessel and opposite to the heater ~~substrate mount site and close to the reaction vessel~~ to
control an ~~the~~ internal temperature of the reaction vessel;

a plate member that is disposed opposite to the substrate mount site in the gas flow
path; and

a thermal conductivity adjusting member that is disposed between the cooling device
~~temperature control means~~ and the plate member;

wherein the thermal conductivity adjusting member comprises ~~has~~ a first section with
a thermal conductivity different from a ~~the other~~ section other than the first section along the
gas flow path to lower a thermal diffusion effect of the source gas in the first section.

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10. (Cancelled)

11. (Currently amended) The semiconductor film formation device according to claim 9
wherein:

the first section comprises ~~has~~ an interspace formed between the reaction vessel and
the thermal conductivity adjusting member.

12. (Currently amended) The semiconductor film formation device according to claim 11,
wherein:

the interspace comprises ~~has~~ a variable height along the gas flow path.

13. (Currently amended) The semiconductor film formation device according to claim 11,
wherein:

the first section comprises ~~is of~~ a material whose thermal conductivity is different
from that of a the other section other than the first section.

14. (Currently amended) A semiconductor film formation device, comprising:

a reaction vessel that includes a gas flow path to allow a source gas to pass through
and a substrate mount site provided in the gas flow path to mount a substrate;

a heater that is disposed outside of the reaction vessel and close to the substrate
mount site;

a cooling device ~~temperature control means~~ that is disposed outside of the reaction

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vessel and opposite to the heater ~~substrate mount site and close to the reaction vessel~~ to

control ~~an~~ the internal temperature of the reaction vessel; and

a plate member that is disposed opposite to the substrate mount site in the gas flow path;

wherein the reaction vessel comprises ~~has~~ a first section with a wall thickness smaller than ~~a the other~~ section other than the first section to form an interspace between the reaction vessel and the cooling device ~~temperature control means~~ to lower a thermal diffusion effect of the source gas in the first section.

15. (Cancelled)

16. (Currently amended) The semiconductor film formation device according to claim 14,

wherein:

the interspace comprises ~~has~~ a variable height along the gas flow path.